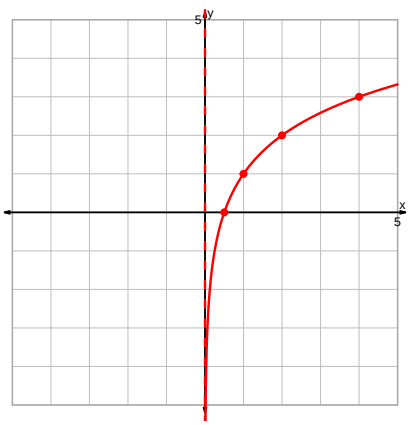
NAME: DATE:

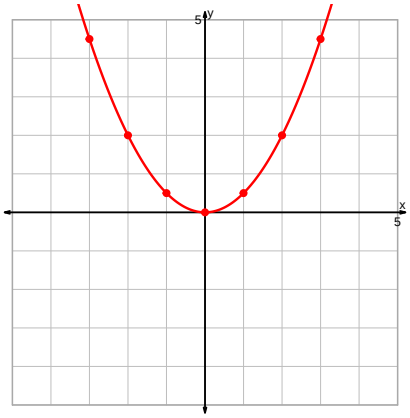
Unit-2 Reduced Mastery Assessment (version 314)

Question 1 (20 points)

Graph the equations accurately. For each integer-integer point on the parent, indicate the corresponding point precisely. Also, with dashed lines, indicate any asymptotes.

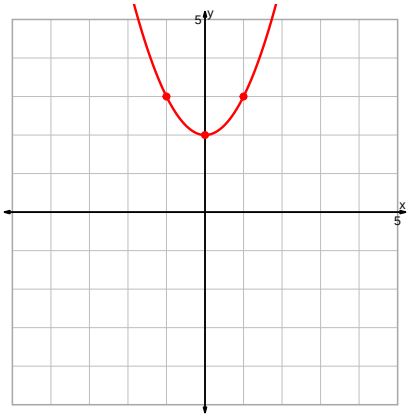
$y = \log_2(2x)$

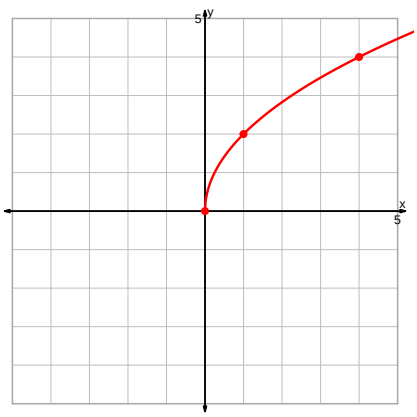




$y = \frac{x^2}{2}$

$y = x^2 + 2$

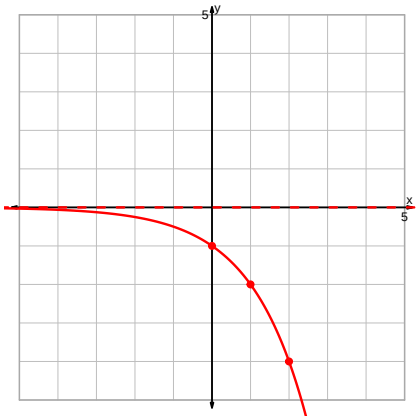


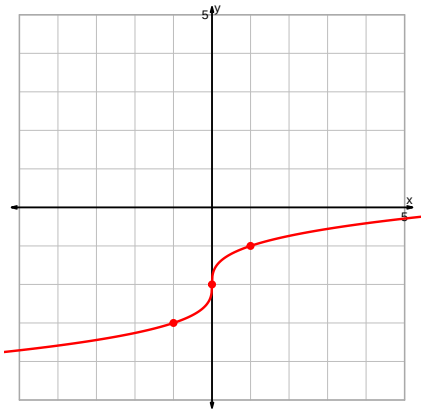


$y = 2 \cdot \sqrt{x}$

Question 2 continued. . .

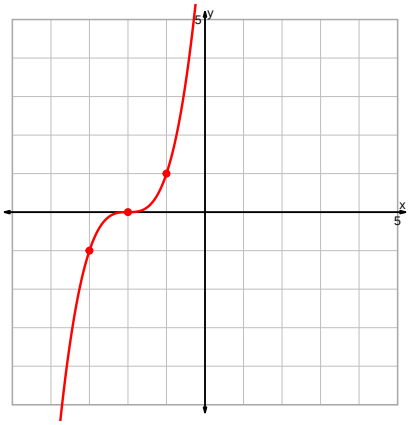
$y = -2^x$

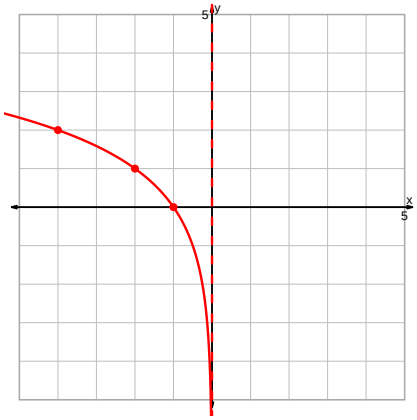




$y = \sqrt[3]{x} - 2$

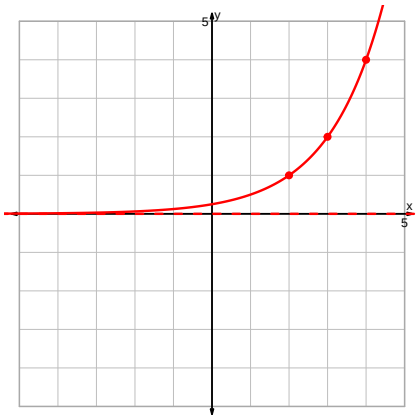
$y = \left(x + 2\right)^3$

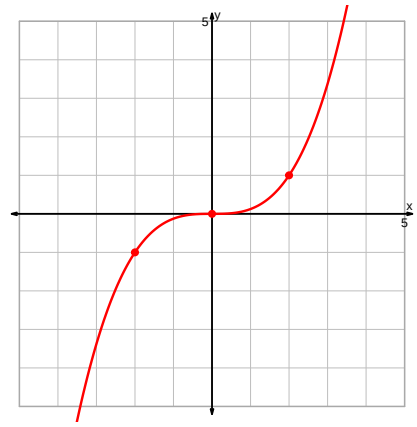




$y = \log_2\left(-x\right)$

$y = 2^{x-2}$

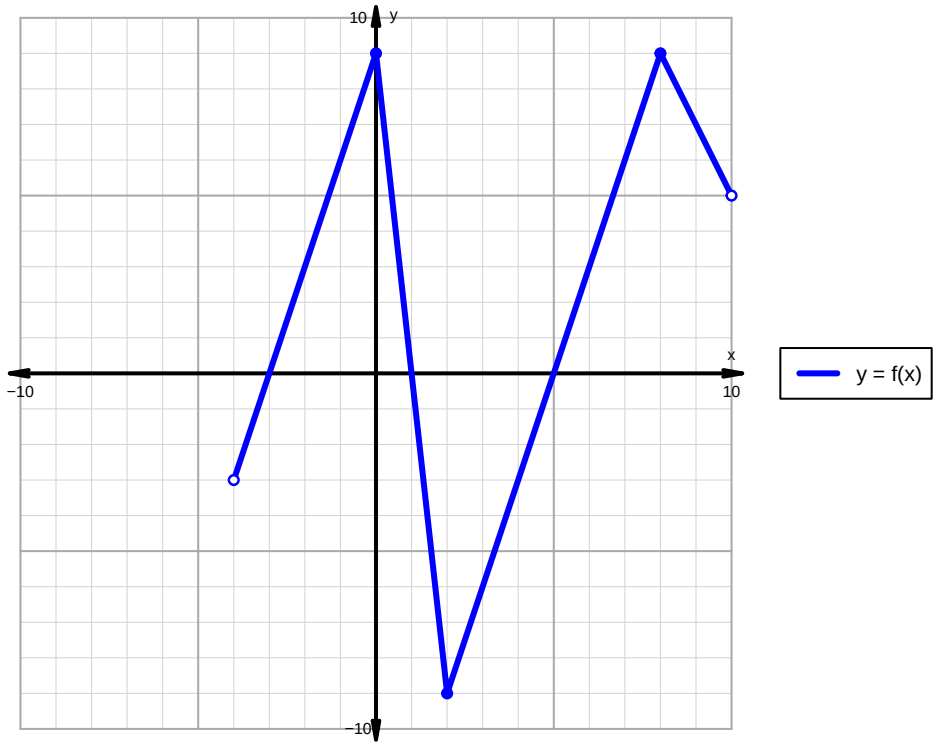




$y = \left(\frac{x}{2}\right)^3$

Question 2 (20 points)

A function is graphed below.



Indicate the following intervals using interval notation.

Feature	Where
Positive	$(-3, 1) \cup (5, 10)$
Negative	$(-4, -3) \cup (1, 5)$
Increasing	$(-4, 0) \cup (2, 8)$
Decreasing	$(0, 2) \cup (8, 10)$
Domain	$(-4, 10)$
Range	$(-9, 9)$